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ORGAN INSTITUTE QUARTERLY

VOLUME 6 NUMBER 3 AUTUMN 1956

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ANDOVER MASSACHUSETTS

TWO-MANUAL FLENTROP IN ROTTERDAM. PEDAL: 16′ PRESTANT, COPPER PIPES, ON BOTH SIDES. GREAT: 8′ PRESTANT, CENTER. OBERWERK: 4′ PRESTANT, UPPER CENTER. DETACHED CONSOLE. EXPOSED TRACKERS VISIBLE IN PICTURE ABOVE CONSOLE.

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★ ★ ★ EDITORIAL BRIEFS ★ ★ ★

THE TENTH ANNIVERSARY OF THE ORGAN INSTITUTE WILL BE COMMEMORATED IN 1957 by a summer session that will hold unusual interest for organists and organbuilders everywhere. In addition to the regular session of master classes and concerts by a distinguished faculty, there will be extended opportunities for private study in individual lessons, and the entire summer season will be brought to a conclusion by an organ festival, a five-day period during which there will be two concerts daily together with other features. Organ concerts will be by outstanding artists who have studied at the Organ Institute during the first ten years of its existence. Dates and full details of the complete summer program will be announced in the next issue of the QUARTERLY.

THE RESPONSE TO OUR NEW MEMBERSHIP INVITATION HAS BEEN MOST GRATIFYING. The number of associate members grows steadily, and it is encouraging to know that so many professional organists want to associate themselves with the Organ Institute. The roll of associate members appears to be a list of the best known and most successful organists in the United States. So far, however, there are relatively few nonprofessional memberships. Since nonprofessionals reap the ultimate benefits of our activities, in the form of finer organs and more inspiring organ music, it seems that they, too, might be induced to participate in the work of the Organ Institute, as supporting members. Could our readers and associates offer some assistance in this matter by suggesting prospects, and perhaps even prevailing on some of their friends to join with them in promoting this project, which aims at elevating organs and organ music to their former position of pre-eminence in musical life? Such assistance would be gratefully received by the Trustees and Director. The Organ Institute is a nonprofit corporation.

HENRY PLEASANTS, THE NOTED MUSIC CRITIC, HAS PUBLISHED A BOOK CALLED THE Agony of Modern Music. Elsewhere he has expressed himself in print as follows:

> Serious music is a dead art. The vein which for three hundred years offered a seemingly inexhaustible yield has run out. What we know as modern music is the noise made by deluded speculators picking through the slagpile. . . . .
>
> The last really modern serious composer, modern in the sense that he spoke with the full authority of the cultural forces of his time, was Wagner. With him ended the long evolution of the art of music in the harmonic or European sense. All that has followed has been reaction, refinement—and desperate experimentation.
>
> Those of his successors who have achieved genuine celebrity—Bruckner, Mahler, Strauss, Debussy, Ravel, Sibelius, Schoenberg, Bartok, Berg, Rachmaninoff, Prokofieff and Shostakovitch—may be described as Strauss once described himself, as triflers "who had something to say in the last chapter." They have had at least a public. For the younger men there has been none. Nothing they have written has been keyed to any considerable segment of contemporary taste or met any contemporary musical requirement other than their own ambition to be composers.

> It is his failure to meet contemporary requirements that distinguishes the contemporary composer from composers of any earlier epoch. Previously, it could always be said that composers represented taste and the emotional and intellectual characteristics of their own time. Handel, Haydn, Mozart, Beethoven, Chopin, Verdi, Wagner, Brahms, Strauss and even the early Stravinsky were all popular composers. There was a demand for composers. There was a demand for their music, and they could make a living from accommodating the demand. This is not the case today.

Would some of our distinguished readers or contributors care to comment on these statements? Such comments would be especially valuable if made by a composer, or by one who could touch upon the various experimental styles that have appeared, and whether or not they are as appropriate for choral and organ composition as they may be for other media.

WERCKMEISTER'S QUAINT, ARCHAIC LITERARY STYLE BECOMES MORE PERSONAL AND appealing as we become more deeply immersed in it. Dr. Sumner has carefully preserved the "flavor" of it for us in his English translation. The subject matter is highly relevant to modern organbuilding that is attempting to recapture the warmth and expressiveness that gradually disappeared from organ music with the increase in distance between organist and organ, and with the accompanying increase in wind pressure. The structural and mechanical elements of an organ are an essential part of its musical character, exerting strong influence on tone, speech, and sensitivity. This fact was impressed on the Editor some years ago when he was called upon to draw up specifications for an organ that was intended to embody unusual musical virtues. A disposition that included not only a stop list but also scales, mouth widths and cut-ups of all the fluework in the three new divisions, all strictly in accordance with the practice of Gottfried Silbermann, was presented to the builder, who expressed complete confidence that he could build the organ successfully with slider and pallet wind chests, as called for. This proved to be false confidence however, as the wind supply was inadequate for full playing, and was subject to "surges" and "bounces," due to some of the structural defects described by Werckmeister. The builder had little understanding of these problems. He was obliged to abandon his business before having rectified the mechanical faults, which persisted for many years. Thus one of the first modern slider chest organs undertaken in this country failed to achieve its full effect due to ignorance of the important matters discussed in Orgelprobe. No organbuilder, no organist, can afford the costly complacency which this example represents; we should make a strong effort to learn *all* that there is to know about our chosen field.

HOMEYER'S REPORTS THAT OUR GOOD FRIEND HENNIE SCHOUTEN'S BOOK, Improvisation on the Organ, is among their musical best sellers. We suspect that our Busman's persistent complaints about the "improvisations" heard in many churches may have had some influence in the matter. Within our own experience and observation many students have gained immeasurably from the use of this book. The same author's Trios by Great Masters offers technically valuable and at the same time musically interesting study material—etudes that are good music. (Both of these works are obtainable at the Charles W. Homeyer Company, 498 Boylston Street, Boston.) Recently Professor Schouten has begun preparing an English translation of his textbook on Musical Form, much admired and widely used in Europe, for an American publisher.

MORE ABOUT SINCERE FLATTERY. INCOMPLETE REPORTS INDICATE THAT OF THE INnumerable organ tours offered this year in imitation of the original Organ Institute tour at least one did not get off the ground because of too few takers. Another one, sponsored by a commercial agency, was conducted for the benefit of only ten tour members, which must have been embarrassing for the sponsor. Any who may be contemplating such a tour next year are advised to be cautious in their choice of a travel bureau. The Organ Institute tour in 1955 relied upon a Boston commercial travel agency for all reservations, to our dismay. In two German cities the reservations at specific hotels were not honored and the party had to seek accommodations elsewhere, in one instance finally settling down for the night in no less than seven different houses in widely separated areas. Reservations for one of the festival performances were short fifteen tickets, and other details were not adequately cared for. Because of these difficulties, future Organ Institute tours will be arranged through a European organization with headquarters and representatives in each of the countries to be visited.

GRATIFYING RECOGNITION HAS BEEN GIVEN TO THOMAS P. FROST'S A MATTER OF Records, in the ORGAN INSTITUTE QUARTERLY. The new authoritative volume, Record Ratings, which enjoys the prestige of publication under the auspices of the American Music Library Association, has chosen his reviews of organ recordings for quotation in its appraisals, using the designation OIQ to indicate his rating. Other publications whose reviews are similarly employed include The New York Times (NYT), The Saturday Review (SR), The Musical Quarterly (MQ), and other distinguished journals. Record collectors can do no better than to follow this reliable guide to recordings of all kinds. It lists full details of virtually all serious music recorded in the United States, together with a summary of the opinions of major critics. This makes it especially valuable in choosing between several different recordings of the same work.

GEOFFREY B. PAYZANT, WHOSE ACCOUNT OF THE RESTORATION OF THE ORGAN to Presbyterian respectability both informed and entertained us, is the editor of a new music quarterly, The Canadian Music Journal, launched recently. The first issue is at hand, and it is clear that Mr. Payzant's scholarship, humor, and literary ability assure the success of this new undertaking.

EUROPEAN ORGANS HAVE OCCUPIED CONSIDERABLE SPACE IN RECENT ISSUES. AMERICAN readers have assured us of their interest in them; in fact, no other series of articles has elicited so much favorable comment and correspondence. We are now planning a series of articles about outstanding American organs, believing that our European readers will be interested in learning about the fine work of our builders.

Organ Institute Quarterly Volume 6, Number 3, Autumn 1956.

EDITOR: Arthur Howes

EDITORIAL BOARD: E. Power Biggs, Seth Bingham, Archibald T. Davison, Rowland W. Dunham, Rudolph Elie, Edward B. Gammons, Ralph Kirkpatrick, Edwin McArthur, Robert Noehren, Wilfrid Pelletier, Arthur Poister, Carl Weinrich, Ernest White. Published four times yearly — spring, summer, autumn, winter — by the Organ Institute at 104 Salem Street, Andover, Massachusetts. Price 50 cents a copy, annual subscription $2.00. Three year's subscription $5.00. Outside of the United States, $2.16 for one year, $5.48 for three years.

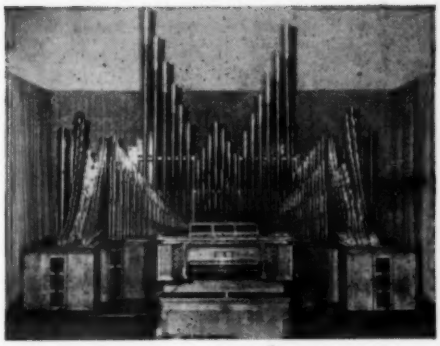
(Entered as second class matter at Andover, Massachusetts)

VERNON GOTWALS, ASSISTANT PROFESSOR of music and college organist at Smith College, gives us a summary of the findings and speculations to date about the "Eight Short" Preludes and Fugues attributed to our immortal master, J. S. Bach. Their authenticity has long been doubted, and even though they may be ideal teaching pieces, it is important to recognize the fact that they probably do not belong among those great works which are the principal reason for our devotion to the organ.

ONCE AGAIN T. CARL WHITMER CASTS the light of his penetrating thought on matters of the highest importance to performing musicians. His mature reflection gives us kernels of wisdom applicable to the most difficult problems. All of his thought, both in this and previous articles, brings us nearer to a clear understanding of the ultimate nature of music and musical performance in terms of human life and existence.

EDWARD K. DUNHAM III DRAWS INTO sharp focus the music of Samuel Scheidt, whose Tabulatura Nova is generally regarded as the cornerstone of the entire structure of Baroque organ music. Mr. Dunham understands his subject, and his comments are convincing.

PROFESSOR JOHN W. PEIRCE OF VASSAR College is well and favorably known to readers through his contributions to A Joyful Noise. His newly published book, The Art of Singing, promises much of the highest value, as readers of his earlier work, Program Building, will readily attest. (Both are offered by Homeyer's.)



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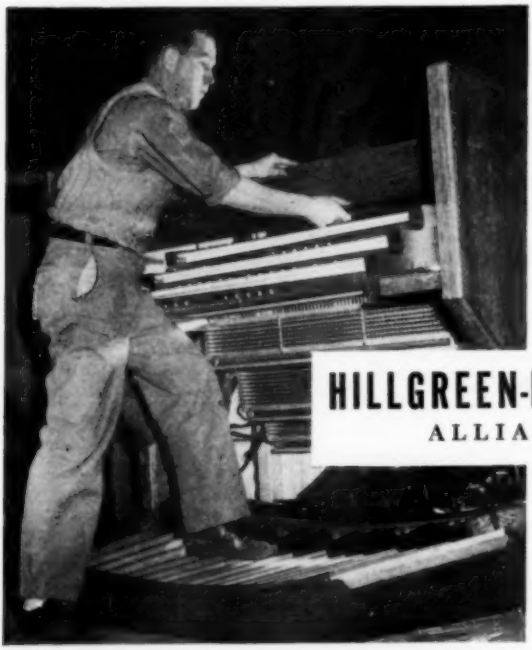

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EDWARD K. DUNHAM III

SAMUEL SCHEIDT

SAMUEL SCHEIDT is today known to American organists—and he is unfortunately known to few other musicians of this country—only by one or two excerpts from his work which have found their way into historical collections of organ music. Even these few musical examples, however, have failed to attain any widespread currency, and for the most part Scheidt is thought of as a textbook figure—as one of the early names in the history of German Baroque music, whose compositions based on chorales were significant historical antecedents of Bach's. For the most part, Scheidt's music is thought of as dry, indeed ascetic, even in comparison with other works of the supposedly austere period in which he lived.

In his native Germany, Scheidt's music has undergone a revival in recent years, but one which unfortunately has not yet penetrated to English-speaking countries; in Grove's Dictionary, for example, he is compared unfavorably with Frescobaldi, even in an article revised by one of the foremost British authorities on old music, and A. E. F. Dickinson, in his book Bach's Fugal Works (London, 1956), claims that "the ear wearies of the superfluous chromatics as much as of any Victorian pretense at Passion music. The main feature of historical interest is the approach to harmony for its own sake . . . His re-creation of keyboard music is demonstrative rather than aesthetically positive." This attitude is to me difficult to understand, particularly in view of Scheidt's close relation (which I shall mention later) to the English virginalist composers. I hope that a brief discussion, such as I propose to give, of Scheidt's music may render it more understandable and hence more acceptable, or may at least afford some insight into that quality of our modern appreciation which finds Scheidt's music unpalatable.

Born in 1587, Scheidt grew up in the twilight of the Renaissance, and in his mature years he, like his contemporary Schütz, suffered from the religio-political Thirty Years' War, which, consequent upon the Reformation and the concurrent development of the modern power-state, ravaged Germany between 1618 and 1648. Much of the spiritual stress of that time can be seen in Scheidt's as in other German music of the period. The composers of the early Baroque period brought to music a more overt expression of personal emotion than had previously been usual, but composers of different nationalities did so by different means and with different emphasis. The Italians, in their development of opera and dramatic monody, cultivated what might be called the tragic emotions, the responses of the individual to dramatic situations, usually of an objective nature, fated by the immutable development of circumstances and personal destiny. The Germans, on the other hand, and to a lesser extent the more sober English, concerned themselves more with the spiritual conflicts of the individual soul, and, particularly in sacred art, with the contemplative rather than with the demonstrative emotions. In line with the concepts of Lutheran theology, their art, particularly in the Protestant North, concentrated on expressions of profoundly personal piety which often verged on sentimentality. In the graphic arts, they preferred intimately emotional scenes from the human life of Jesus to the representations more common in the South of the Christ or the Virgin in royal estate or of the triumphs of the Church Militant.

This more subjective tendency is reflected in Protestant German music by a reliance upon the aesthetic effects created by means of the internal characteristics of the music rather than by its medium. The setting of a musical piece for voices and instruments or its registration for organ was determined by its musical construction rather than vice versa.

These characteristics of early Baroque German music are perhaps more clearly displayed in Scheidt's works than anywhere else. To gain that understanding of them which is necessary for their full appreciation it may be helpful to examine the forms in which Scheidt wrote—particularly those with a liturgical function—and the aesthetic significance of his techniques of composition.

That Scheidt is usually thought of only as an organ composer is something of a misconception, at least with respect to the volume of his work. He wrote many times more choral music than keyboard music and a fair body of instrumental music besides, and his contemporary reputation probably rested at least as much on these works and on his teaching as on his achievements as a keyboard performer and composer. But his important contributions to the development of Baroque music certainly lie primarily in the keyboard field. It should be unnecessary to stress his importance in the history of the organ chorale and chorale prelude, which has, if anything, been overestimated. He was not really "the father of the chorale prelude"; others had written extensively before him in similar forms, from before the time of Arnold Schlick down to Sweelinck, with whom Scheidt studied in Amsterdam in his youth. Nor did Scheidt's contribution lie in his systematic application of the technique of abstract figuration in the style of the English virginalists, for Sweelinck before him had used a very similar style. It rather lay in that he gave chorale settings the place of first importance among his organ works and that he first carried the English techniques, as applied to the chorale, beyond the stage of experimentation and by the artistic vitality and power of his compositions secured for the chorale setting its prominent place in German music. And his many pupils and followers, though they were none of them composers of the first rank, disseminated his innovations so thoroughly that their influence never abated during the Baroque period.

Scheidt's principal keyboard work was the Tabulatura Nova, published in three parts in 1624. Other compositions, few in number and for the most part apparently immature works, have survived in manuscript; but the remainder of what he may have written for keyboard between the time of the Tabulatura Nova and his death in 1654 has vanished. His Tabulaturbuch, published in Görlitz in 1650, is a collection of simple chorale harmonizations intended for singing and accompaniment and is hence outside the scope of organ music per se.

The first two parts of the Tabulatura Nova contain, in addition to chorale settings, a number of fantasies, fugues, dances, a set of variations each on the hexachord and the Passamezzo, and a number of variations on popular songs. The third part, aside from two brief pieces entitled "Modus ludendi pleno organo pedaliter," with double pedal, and a hymn setting, consists of a mass and a setting of the even verses of the Magnificat to each of the nine tones, to be played by the organ antiphonally with the choir.

The chorale settings are usually sets of variations, though one is in fantasy style. The first verse is apt to be in motet style, with an imitative introduction of each line of the tune followed by a cantus firmus presentation in the soprano. Then follow several verses in two or three parts, often symmetrically arranged around a central verse in

four parts, followed perhaps by a variation with the melody in the pedal and a closing full-organ verse again in imitative style. The melody is usually presented as an unadorned cantus firmus, and except for the imitative verses the accompanying material is not drawn from the tune.

Perhaps the most interesting are those verses in the form of bicinia, where the melody is heard with a single accompanimental voice. Where lines of the melody are repeated, the verse is usually written in double counterpoint so that the repetition is inverted; one variation on the Dutch song *Est-ce Mars* is written in triple counterpoint. The accompaniment in the bicinia is treated most ingeniously; being written in notes a quarter or an eighth the length of those in the melody, it demands great care in the subtle variation of the harmonic rhythm to avoid harmonic monotony in those places where it moves mostly by skip, since all dissonance—including, of course, the second inversion of the triad—must be avoided. This same skill in the treatment of harmonic rhythm passes an even severer test in the Magnificat verses, where, of course, the reciting tone continues for several measures. The figuration used in the accompaniments is in the abstract style of the English virginalists and is a marked improvement over the merely ornamental figuration, consisting largely only of trills and passages, used in the coloristic style prevalent on the Continent before Scheidt. A single figure is used to accompany each phrase of the melody, and a new figure is introduced for each new melodic phrase. The new figures, however, are not abruptly introduced but are developed both melodically and rhythmically out of the preceding ones. This development is so plotted throughout a verse or variation as to lead to a building-up of dynamic energy to a climax corresponding to the climax of the melody upon which the piece is based, and its subsequent release. A perfect example of this technique is the fourth verse of the well-known *Da Jesus an dem Kreuze stund*. All of the aspects of melodic construction participate in this dynamic development, but the easiest to analyze is the rhythmic. A duration of a quarter note may be divided into eighths, dotted eighths, and sixteenths in several ways: two eighths; an eighth and two sixteenths; two sixteenths and an eighth; a dotted eighth and a sixteenth; a sixteenth and a dotted eighth; a sixteenth, an eighth, and another sixteenth; and four sixteenths. There seem to be two separately appreciable qualities to rhythmic figuration of this sort, the quality of movement, whose degree depends mainly upon the number of notes in a given time, and the quality of force which is enhanced by irregular division of time. Thus a series of quarter notes each divided into two eighths will have the same degree of movement as a series divided into dotted eighths and sixteenths, but the latter seems more forceful or energetic, the former more quiet and measured. This quality of force seems to have direction, too: a series of dotted eighths each followed by a sixteenth presses forward, while the reverse pattern sounds halting and static. The same distinction applies between the patterns of an eighth and two sixteenths, and its reverse. This distinction is, of course, nothing more than the familiar distinction between upbeat and downbeat figures.

It is interesting to note that Scheidt never uses those patterns which I have described as static, but only those which press forward and those which move evenly; a contrast may be seen here with Frescobaldi and the English composers. The choice of these rhythmic patterns is one of the principal means Scheidt uses in his dynamic development, and his skill here is unmatched even though he may use a smaller variety of patterns than some of the other composers in this style. His avoidance of the static patterns lends to his music a certain serenity and an inexorable sense of determined

monotonic development akin to that found in Bach.

Scheidt's use of rhythm as a dynamic technique is of course accompanied and paralleled by a corresponding development of tension through other technical means, particularly dissonance, texture, and the melodic curve. The piling-up of suspension dissonances in increasingly shorter note values and in closer and closer contrapuntal imitation, together with the strategic plotting of the melodic curves of the different parts, is the principal dynamic technique of the imitative motet-style pieces, where of course figural writing does not occur. In figural pieces of more than two voices the overlapping of rhythmic patterns and the distribution of motion among several parts is a textural device which also contributes to the dynamics. And the distribution of all these devices among the several verses of a chorale, together with the relative intensity of the climaxes of the verses and the development in harmonic power, lends to the longer work at once unity of the whole and variety among its parts.

Scheidt's harmony, too, is of no little interest. It is laid out within the framework of the extended modal system of the late Renaissance, and uses in addition to the church modes the modern major and minor, that is to say, the Ionian and Aeolian modes. Since the keyboard temperament then current permitted only the accidentals C♯, E♭, F♯, G♯, B♭, and sometimes D♯, the device of transposition of the mode up one or two fourths afforded Scheidt a means—exploited more by him than by any of his contemporaries—of carrying his modulations further in the dominant direction and thereby better balancing the strong subdominant flavor of several of the modes, particularly the Phrygian, the Aeolian, and the Dorian. This ingenious device is indicative of the pains which Scheidt took to bring a quality of harmonic tonality to the modal system. It is interesting and perhaps unfortunate that he was almost alone in thus combining the progressive element of tonality with modal conservatism. The distinctive means of tonal definition which Scheidt employed would take too long to discuss fully here, but his skill is witnessed by his ability to write a piece in the Phrygian or the Mixolydian mode (for example, *Da Jesus an dem Kreuze stund* and the secular variations on *Also geht's, also steht's*), in which the final tonic does not sound so much to modern ears like a dominant as to cry out for resolution. Scheidt was also able to use a certain degree of systematic chromaticism (as in sections of the Fuga Quadruplici, the last two themes of which are the descending chromatic tetrachord and its retrograde, in the last verse of *Da Jesus an dem Kreuze stund*, which contains an augmented sixth chord worked remarkably well into the harmonic fabric—much better than uses of the same chord by Gesualdo, Marenzio, and Frescobaldi, and almost as well as in Bach—and to a lesser extent in the fourth-tone Magnificat) without doing violence to his modal-tonal system.

These technical means are common to the different forms in which Scheidt wrote. The forms themselves require little comment. The construction of the secular variations is in general similar to that of the chorale settings, though the lines of the melody generally follow one another without the interludes found in the sacred pieces, except in some final variations written in *proportio sesquialtera*[1] with systematic

[1]"Proportio sesquialtera": a tempo one and one-half times as fast as either the preceding or the "normal" tempo, expressed by the ration 3/2. Three notes at this tempo occupy the same time as two notes at the former or reference tempo, as three quarter notes to be played in the time of two. The ratio 3/2 also expresses the proportion of the lengths of the pipes in the organ stop Sesquialtera, sounding the twelfth and seventeenth above the fundamental. In the old system of tuning known as **chormass** the pitch was lower than that in use today, and our 2 2/3′ and 1 3/5′ dimensions were then approximately 3′ and 2′. [Editor]

imitation, and except that coloration of the melody is often employed. The free forms are those commonly employed in the early seventeenth century; the so-called "fugues" are really fantasies in which one theme or set of themes is used throughout.

Proper performance is absolutely essential to a full appreciation of this music. One is apt to be misled by the austere appearance of the printed music, devoid of any ornamentation, and play it too slowly rather than too fast. A speed of 48 half notes to the minute is nearly always too slow, and in many pieces 72 is not too fast; those to whom the latter speed seems high should realize that not all music written three hundred years ago is "graveyard music," and that it was not all intended to be read perfectly at sight by a twelve-year-old beginning player.

The fundamental question in the performance of any old music is whether it should be played as the composer actually intended it—and this would, strictly speaking, imply using only those resources available to him—or as modern ears expect to hear it. It is futile to speak of playing it in such a manner as to have the same aesthetic effect on modern listeners as it did on those for whom it was written, since our aesthetic faculties—not to speak of our attitude toward any religious or philosophical ideas it may have been meant to express—are quite differently conditioned, so that in any case it would be impossible to know how it affected its original hearers; and furthermore, much older religious music was not written for its mortal audience at all but rather as a pure act of worship. If it be granted that music has some meaning, it will not have the composer's meaning if played in a style radically different from his, and only the very hardiest music—Bach's played in symphonic transcription or Brahms' played on the harpsichord—can survive transplantation. It is better to play the music as nearly as we can in the manner intended, for if we do so enough our ears will soon become accustomed. It is somewhat like learning a foreign language, though the difference between musical styles is less than that between languages: we may appreciate the melodiousness of poetry in a strange tongue, even without understanding it; if we learn the language more or less well, we can read and speak for ourselves, though perhaps with an accent which to some extent may impair understanding; but no matter how thoroughly we master it our understanding will differ at least subtly from a native's. It is a difficult process, with music as with language; but those who know foreign languages can vouch for the worth of their literature, and those who have learned old music assure us that it is worth the trouble.

A final question of performance, and one which is very difficult of solution in this country, is that of organ registration. In the case of Scheidt, we are fortunate in that he gave indications of his intended manner of registration at the end of the Tabulatura Nova (a modern edition, edited by Christhard Mahrenholz, is published by Peters and Ugrino), and in that we have the stop list of his organ (given by Mahrenholz, op. cit., also Samuel Scheidt und die Orgel, Musik and Kirche, 1955, Heft 1). Inasmuch as Scheidt himself supervised the construction of this organ the stop list is of great value, especially as other organs of the period survive to give an idea what the stops sounded like. But more important than the names and pitches of the stops is their sound; I can derive more satisfaction from playing old music on a small American tracker instrument from the end of the last century, with its clear and relaxed sound, than from playing it on one of our monstrous modern instruments with a "Baroque" specification but with raucous voicing, mixtures of disproportionate scale so composed as to obscure the voice-leading no less than the woolly foundation stops of thirty or forty years ago, and huge

batteries of reeds which envelop anything played with a *plenum* registration in what seems like a thick coating of gumbo mud. What is most to be desired in organbuilding, but what has unfortunately been sadly neglected in our "Baroque" revival, is a clear, singing tone, present on all dynamic levels and in all tonal combinations. The actual choice of stops, like the other smaller details of performance, should be a matter of educated individual taste exercised within the limitations imposed by the style of the music. A good example of how live Scheidt may seem is afforded by Luther Noss' excellent record of pieces from the Tabulatura Nova.

If Scheidt's music can thus be played, with taste and discretion, and above all with understanding, not only of his style and the manner of performance for which his music was intended, but also of the intellectual and spiritual forces in his environment, I have no doubt that it will find as secure a place in our musical repertoire as have the works of other composers of his time.

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VERNON GOTWALS

THE EIGHT LITTLE PRELUDES AND FUGUES

EVERY organist knows Bach's Eight Little Preludes and Fugues (BWV 553-560). Most organists have studied one or more of them with some teacher or other. Some organists use them regularly in teaching beginners. There are organ students, indeed, to whom the name of Bach suggests mainly the Inventions and the Eight Little Preludes and Fugues. The Eight have been recorded by such eminent organists as Ernest White and, more recently, E. Power Biggs. It is interesting, then, that so few organists know the historical question raised by these charming and perennial miniatures: Did Bach really write the Eight Little Preludes and Fugues?

The Eight were first published in 1852 in the Peters edition of Bach's Organ Works, volume 8. The editor, F. A. Roitzsch, there writes:

> In the foreword to volume IV . . . we promised the public some of the master's more important youthful works. Among them we class these little preludes and fugues which will probably be gladly received by many admirers of J. S. Bach because they are easy to play. For the edition of these preludes and fugues an old copy from Forkel's estate was painstakingly compared with one other manuscript in the Royal Library in Berlin. Apart from insignificant copyists' errors here and there, both manuscripts agree very closely; one may thus conclude that they have a common source, a hypothesis strengthened principally, among other things, by the missing [forty-sixth] measure of the E minor Fugue, which is restored in this printing . . . .

When Ernst Naumann edited the pieces in 1891 for the Bach Gesellschaft edition (volume 38), no new sources were available (except a newer version of the D minor Prelude and Fugue). In the foreword, Naumann writes:

> The copy is an old manuscript on the whole passably good but here and there quite unreliable; a second manuscript was also available in the preparation of the Peters Edition which seems, however, to have offered nothing better.

The manuscript that Naumann used is most fully described by Spitta (Bach, English translation, I, p. 399, note 84):

> An older manuscript of these, from the legacy of G. Pölchau, the Hamburg music teacher, has come into the possession of the Royal Library in Berlin. The title is:
>
> VIII PRAELUDIA
> èd
> VIII FVGEN
> di.
> J. S. Bach (?)
>
> On the right side below:
>
> Poss:
> C. A. Klein.

> There is in my opinion no reason for the question mark, which is as old as the rest of the title.

Widor and Schweitzer (in the Critical Notes to volume 2 of their edition, published by G. Schirmer) say only that the manuscript source is a copy, not an autograph. Karl Straube, writing a preface to his new edition of the Eight for Peters in 1934, says:

> The poor quality of the available manuscript material and the well-founded doubts concerning the authorship give the editor the right, make it his duty, to compensate with discreet retouchings for defective and unclear places in the state of the text as transmitted.

Before leaping to defend Bach's authorship, we may well first ask: What reasons do we have, after all, for thinking that Bach did write the Eight?

There is no autograph to establish authenticity. While the absence of a copy in Bach's own handwriting is not alone cause for suspicion (the famous Toccata and Fugue in D minor, BWV 565, comes down to us in copies only), still many of the presumably early organ works are transmitted in several eighteenth-century manuscripts (the aforesaid Toccata, for example, or the Prelude and Fugue in E minor, BWV 533; the one in G minor, BWV 535; the "Little" Fugue in G minor, BWV 578; or the Fantasia in G major, BWV 572). The Eight, however, rest on two copies alone; one of them has long since disappeared while the other carries with it its own question mark, which despite Spitta cannot be erased.

If we hunt an answer to our question (or a date for these pieces) in published authorities, we shall find considerable disagreement. The pioneer Spitta placed the Eight in the early Weimar period (i.e. 1708-1710), pointed out the twofold influences of the northern masters and of Vivaldi (in the Preludes, especially), decided that "they bear the stamp of a commanding master of composition," but concluded also that they must be pieces for students because "they demand a not inconsiderable technique, . . . but do not display enough technical difficulty and are not important enough in substance for the master's use." (Spitta, op cit., I, pp. 399-400.)

Schweitzer, some thirty years later in 1905, said only that they "were written for the instruction of the two eldest sons," or around 1715. He and Widor in their 1912 Schirmer edition already mentioned repeated this opinion:

> We are probably safe in assuming that these numbers were all composed previous to the year 1714. The eight short preludes were intended for instructive pieces. It is quite possible that they have been handed down to us, not in their original shape, but rewritten with emendations. This supposition most plausibly explains the fact that they exhibit traits of a certain imperfection side by side with masterly writing. The revision may have been done at the time when Bach was initiating his oldest sons into the organist's art with the aid of these preludes and fugues.

About this same time (1912-1913) Johannes Schreyer had decided that the Eight because of their technical defects could not be by Bach at all. This decision was written in the second volume of his Beiträge zur Bachkritik, a book whose method, it is only fair to note, was at once questioned by Schering among others.

It is interesting to find that by 1922 Harvey Grace, while he thought the Eight were written for pupils in Weimar (and therefore after, say, 1710) because "the general

level of excellence in writing proves [at all events the fugal part] to belong to a period when the composer was approaching maturity," nevertheless found the preludes "a long way below the fugues in interest" and regretted "that so many pupils are made to waste time over them." (The Organ Works of Bach, pp. 49-51.)

Karl Straube by 1934 flatly rejected the authenticity of these pieces. "The Eight Little Preludes and Fugues," he wrote in his preface,

> cannot be associated with the life work of the great Thomas cantor, because they lack that conformity to the laws of organic form that is inherent in Bach's output, giving his art its towering significance, its beauty and worth. If origin and species are to be indicated in words, then at best the label 'From the workshop of the master' suits the genesis and importance of this fugue collection. Whether the young Friedemann, or the developing Carl Philipp Emanuel, was the author of these preludes and fugues? — or another pupil, perhaps Johann Christoph Altnikol, or Joh. Ludwig Krebs? — to what extent a kind guiding hand has helped? — all these questions can never be clearly answered.

Soon after (1937), Hermann Keller published his article Unechte Orgelwerke Bachs (Spurious Organ Works of Bach) in the Bach Jahrbuch (vol. 34, pp. 59-82), wherein he discusses the Eight at length. He classifies them as "presumably spurious works," points out the widely divergent opinions which we have already seen, and suggests as the true author Bach's pupil Krebs. "The many echoes of Bach phrases and themes (e.g. the theme of the A minor Fugue) together with the immaturity of construction and form are easily explained," he feels, "if one supposes until new evidence is found that he is dealing with a youthful work of Joh. Ludw. Krebs." Keller repeats this suggestion in his book The Organ Works of Bach (Peters, 1948) and concludes (p. 58):

> The whole style of these works bears the stamp of Telemann's epoch; this excludes the possibility of a youthful work of Bach's; but equally excluded is the possibility that Bach should have written by the time he was in Leipzig anything so immature and incorrect. They need not lose their popularity for the instruction of beginners because of these statements.

(The curious who wish to see an example of the immature or incorrect technical details that have bothered so many scholars may examine the pieces as printed in volume 8 of the Peters edition [Ed. Peters No. 247] and note, for instance, in the C major Fugue, four measures from the end, parallel octaves between soprano and tenor; or in the E minor fugue, measure 27, parallel octaves between alto and bass; or in the G minor Fugue, four measures from the end, near-parallel fifths between soprano and alto. These places and many others have been corrected in the Bach Gesellschaft edition and will thus appear corrected in many subsequent editions. The emendations in Straube's edition [Ed. Peters No. 4442] are not mere corrections of such places but constitute much bolder revisions and at times plain rewriting of a whole passage.)

We come finally to Schmieder's monumental Systematic Thematic Index of the Musical Works of Johann Sebastian Bach, the abbreviation of whose shortened title (BWV, for Bach-Werke-Verzeichnis) now identifies Bach's works as precisely as Köchel's initial identifies Mozart's. Published in 1950, this catalogue sums up:

Time of origin. Weimar before 1710. Doubtful if work is genuine. (Composer Johann Ludwig Krebs, or his father Johann Tobias?) . . .
Copies. In quarto miscellany, middle of 18 cent. ("Poss. C. A. Klein"), Berlin Lib. . . . . The Prel. and Fugue in D minor, alone, on 3 sheets oblong quarto from the 1st half of 19 cent . . . .

We have by now heard enough to see that the Eight Little Preludes and Fugues are foundlings and have had to suffer accordingly. If it cannot be proved that Bach wrote them, neither has it yet been proved that someone else wrote them. There is, moreover, only circumstantial evidence to suggest that Bach did not write them. Every man is free "until new evidence is found" to believe what he will concerning the origin of the Eight. Just as he is free to like them or dislike them, to play or let them alone, to teach them to his pupils or to ignore them as teaching material. He is free to use the oldest edition with all its faults or to use Straube's "retouched" edition.

Those of us who know and admire the early works already mentioned and such others as the Prelude and Fugue in D major, BWV 532; that in C minor, BWV 549; or the variations on *O Gott, du frommer Gott*, BWV 767, may continue intuitively to doubt that Bach really wrote the Eight. But they will justly continue to have their champions.

We who play and teach, however, are no longer free to let those who hear us or who study with us imagine that Bach and the Eight Little Preludes and Fugues are synonymous, that Bach's authorship of these pieces is unquestioned, or that they are typical of Bach's output whether youthful or mature. They are attractive children regardless of their parentage; let us not claim more for them than that.

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THOUGHTS ON AUDIENCE COMMUNICATION

The Arts are the consummate examples of human experience *at its best.*—ERWIN EDMAN

SEVERAL months ago there appeared in the New York Times an article written by an important music critic, Mr. Howard Taubman, on the playing (in Carnegie Hall, New York City) of a well-equipped instrumentalist. In it he enumerated some of the factors which prevented this artist from communicating with his audience, such as 'a lack of personality, a lack of inner strength, a lack of musical outline." Also, the pieces were "noncommittal," as it were, "although all technical factors were present in high degree."

The above seems to show that the bases of this judgment were unstudied, unchecked, uninhibited, and undisciplined emotional powers which were not adequately adjusted to the artist's superior mental and technical equipment.

Also, it seems equally certain that a comprehensive faith, a dedication of spirit, and an earnest and humble approach were also lacking. Together, these form the real core and urge of great interpretations, those interpretations which reach the hearts of the listeners as vibrant and expanding visions in tone. The novelist Meredith wrote of a picture "painted with spiritual strength which is the Solid in Art." Certainly music, as all great art, is the richest distillation of the spirit and demands the whole of the inner self.

In certain previously published articles I have tried to penetrate into what Mr. Arthur Howes aptly calls "certain obscure areas of musical development." They were studies in Imagination (Organ Institute Quarterly, Summer 1955), Memory (The Diapason, January 1955), and Improvisation (Organ Institute Quarterly, Autumn 1952). In this essay I am interested in self-projection. That is, establishing contact with one's audience. Most organists need to understand why their playing sometimes fails to register, in spite of generally fine technique. I am assuming that the technical level is high.

While this study may apply to all musicians, the organist has some special problems to solve. Unlike the pianist he deals with tone and quality and color made mechanically. Unlike everybody else he has hundreds of gadgets on his mind.

Often he is out of sight. When he is in full view and gets off the organ bench he frequently looks as if he were getting out of bed! Since he has numerous handicaps he needs every ounce of inner emotional power and the highest artistry, together with good stage manners.

If the young organist is in college, majoring in music, he will be greatly enriched by selecting as a minor a subject closely related to music—radiating from it, as it were —as mathematics and physics with their endless vistas. Poetry and the history of painting are filled with future interest, the abstractions of contemporary painting running a close second to the pure abstractions of music. Or, some foreign language leading to musicology. And if the student is after a fascinating and all-round boosting of the inner self, there is always with us the new psychology.

The remaining thoughts are placed in detached paragraphs, somewhat in the style of Pascal's Pensées. These form a series of psychological overtones and undertones which

act as a stimulating and awakening technique, since the interpretation of masterworks demands an approach from within.

No study is of much value in itself, for itself. The end of things is not violin or piano or vocal technique, but what is behind that technique. Technique with not only a soul but with an idea, a plan behind the exhibition of ways and means.

Only when we have a vital urge for our actions in this life can we make our work radiant.

Real life, living life, is a matter of feeling and thought about our work, the lives of others, God.

The art of just self-criticism is difficult of attainment. It is an important factor in ultimate self-projection and must include a listing of strong points as well as weaker ones. Stressing weak features alone does not give a just estimate of your worth.

Here are some self-examination questions concerning artistry, a prime factor in the revealing of self:

Do I study minutely the phrasing of the entire work before playing? When I play are the phrases dealt with consistently? Is my registration of the momentary kind or is there a color plan? Does the chosen tempo permit essential passages to sound transparent and luminous? Am I able to play a fast piece faster than the performance tempo to be sure I have speed margin? Do my slow movements become draggy? Have I been studying the often innocent-looking transitions closely? Do I have too many climaxes, and by so doing obscure the most important one?

Of the following types, which one—if any—am I? The first type might be considered to be those who have difficulty in getting in touch with others and whose attempts often lead to small results, due to the absence of a well-controlled expression of personality in the performance. Then there are the egocentric, or big-headed, or overly self-assertive, who express their own thought too prominently and so overshoot their mark.

Their opposites have inferiority complexes, approach people and issues faintly, and fearfully, understate their case and so produce the effect of not believing in themselves, want jobs and yet are afraid of the responsibility involved.

Again, we have those who keep their weather eye open for effect and are thoroughly superficial in life and music.

You will recognize good thinking when musical or verbal ideas have clarity, consecutiveness, power to reach climax, repose enough to seem unhurried, and a conclusion that finishes something begun and doesn't just simply stop.

One of the great drawbacks to a vital expression on the organ is unrelated color effects. The isolated colors may be very lovely, but the effects are inconsequential and are seldom impressive to a knowing ear.

Few organists are creative. They seem to rejoice if they can improvise even a modulation or a short interlude. I would point out that the ability to improvise is a part of self-projection. Even in a small way creative work contributes to an organist's richer life. There is in improvisation an expanding influence.

Always be deeply grateful for what you have done and for visions you really see and have the privilege of carrying out. The only person who is markedly and hopelessly pathetic is the man who has detached himself from his plan and ideal, sees only what he has not, and generally develops a negative proposal for life.

An understanding of the difference between the two processes of creative work and reproduction is highly important. They are different. Playing is an activity that is both mental and muscular. Creative work is, in its first stage, a kind of impassivity, both mental and emotional, that opens the channel for spiritual essence to have its way. The player seems to be efficient. The composer seems to be at times but the amanuensis of a higher power that brings forth the new, the strange, the vital over-self.

Form, counterpoint, and all the rest should be studied from the standpoint of composition. A raw analytical attitude toward musical theory has often produced pedantry, picayuneness, impoverishment of ideas, pinching rules, and punchless taste.

We must live deeply and richly. We must know that great musical or other gifts of expression come forth, not because we inherit the soft spots of life, not because we have heard every musician, not because we are the biggest show on earth, not because we can identify every phrase of Beethoven, but because we are feverish with the great pulse of life. Read about Jane Austen, the Brontés, Francis Thompson, Schubert, and all the other starved souls who poured exultant life from their inner sanctuaries over the whole wide world.

When playing, the organist must be wrapped in the mantle of spiritual absorption.

Some years ago the New York Times gave voice, in an editorial, to a deep instinct when it said: "Why are we here? Where do we fit into the cosmic scheme? Questions cry out. The physicist looks into his equations but sees no answer. This is why Einstein and others of his greatness have wondered whether the artist may not be aware of something in the outer world that escapes the mathematician. *Perhaps the mystic is worth listening to!*"

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ORGLEPROBE

Translated by W. L. SUMNER

CHAPTER VII

SLIDER ACTION. ROLLERBOARDS, PEGS, KEYBOARDS, AND THE LIKE.

THE whole of the soundboard should be well made, generously spaced and of good solid wood; otherwise the sliders may stick. Above all, the pegs must be of requisite strength. The rollerboards should be well made so that the rollers do not lie too close together; otherwise in damp weather the wood swells and creaks horribly. Also dust may fall in, and thus it should not be overlooked that rollerboards and even the action of the Rückpositiv should be so placed that accumulated dust can do no harm.

Some builders do not construct rollerboards but set the rollers in strong oak frames, and this appears to be reasonable, though care must be taken to see that the keyboard levels are even. Others desire no rollerboards but link the action with squares. Some desire a reversed roller, set crosswise. The keyboards must be set evenly (i.e., with consistent depth of touch). One keyboard must not be set high and the other low. But even worse is the possibility that if the wood shrinks the rollers will stick fast between their pegs. Thus all keys would stick if insufficient play were left between them. It is better to avoid this latter danger by building the rollerboards in a conventional manner and securing each keyboard firmly with screws so that its level remains even.

Despite their length the rollers must be strong; otherwise they twist and bend and the keyboard cannot be used properly. Further, a keyboard must not have too shallow or too deep a touch. Careful adjustment must be made to each part of the tracker action. The pegs on which the trackers hang must be made according to plan. It is not unprofitable for two or three holes to be bored in the roller "pegs" to facilitate insertion and extraction. It must be considered that wooden pegs are better than iron ones for rollerboards as well as for rollers, since they do not rattle so much. However, holes for roller pegs should not be made too large; otherwise they too will rattle unless a wire nail is used for retaining them.

The stop knobs must draw easily, not too stiffly nor too loosely. They must not pull out too far, but must lie regularly and comfortably under the hand.

For the Rückpositiv the slider levers must be of iron, for if they twist much and cannot be moved easily it is annoying. Such an organ rarely sounds well.

CHAPTER VIII

CONSTRUCTION OF WIND CHESTS; HOW THEY MUST BE MADE; THE NAMES OF THEIR PARTS; EVERYTHING THAT IS THERE: THE JAMBS, CHANNELS, PIERCED CHESTS, SLIDERS, LOWERBOARDS, GROOVES, UPPERBOARDS, AND PIPE RACKS.

So far much has been said about the wind chests, and some young organists and amateurs will not know the meaning of this or that term. I feel compelled to add a short description of the wind chests for their enlightenment; nevertheless, organbuilders do not always agree on these terms. The wind chest is in itself an oak frame, at least three or four finger breadths deep, with oak or wooden sides. There is a wind chest for each keyboard; each one is constructed of proper proportion according to the number of stops which it contains.

Older builders provided in place of this frame a strong oak soundboard according to the size of the organ, the channels all cut out and the sides filled up. This was called a pierced chest. Some have chiseled out the "planks," and this is called a "fitted-up" chest. The channels of the covered chest or frame are, by and large, secured to the lower part. Under the open side is set the wind chest proper, in which is the main pallet which cuts off the lower part of the channel and which is opened by the key. On the upper part of this frame is secured the lowerboard, 1/2" - 2/3" thick. However, some do not use a lowerboard, but the channels on the upper part of the chest are completely blocked. Thus the frame must be higher, particularly in large instruments, so that the channels are not too small and low. On this leather-covered lowerboard are set the sliders and the separating ribs (spacers), which are at least 1/2" thick and go the whole length of the chest. Through these sliders and lowerboards are drilled holes right into the channels. The wooden spacers are called ribs. On these sliders and ribs is set a board of approximately 1 1/2" thickness, placed so accurately that no wind escapes at all, or flows from one place to another. Because the slider moves to and fro across the holes in the lowerboard, it is called a slider chest. The pipes are set on the upperboard and the slider holes must coincide when the slider is drawn. The board is fed from below and the wind flows in, almost obliquely. It would be good if holes in the upperboard coincided with screws in the lowerboard so that, when necessary, they could be easily unscrewed; so that in changes of weather, particularly in Lent, the sliders, which are then hard to draw, might be eased, and this would prevent much damage. Otherwise the whole of the pipework must be removed, which is an expensive matter. Let it be noted here that nowadays lowerboards are not made; wherefore the simplest sealing of the most excellent builders is best retained and the lowerboard discarded. So much for the general type of slider chest.

Concerning the spring chest, each key has its own "board" and each pipe is on its own "board" and has a separate pallet, so that many pipes require many pallets except mixtures and other multirank stops, since each stop has its own pallet. These same "boards" are set right over the open groove; for every pallet there is a lever actuated either by "parallels" or by sliders which can control that voice, so that when a stop is drawn the pallet opens. When the stop is pushed in, the pallets are closed by the springs below; for that reason it is called a spring chest. The pipes are set on a board just as for slider chests. The board, however, in which the pipes stand secure (so as not to fall) is differently named by organbuilders. These I will not consider in such a short space, as I have in the case of other terms, for builders are not agreed on them and this concerns a novice but little. The amateur will be able to observe if the names used agree sufficiently with the facts. Provided that the organ is good they may be called as desired.[1]

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[1]Obviously Werckmeister is referring to rack boards here. In view of Werckmeister's disjunct style of writing it is not always easy to tell whether he is referring to spring chests or to slider chests. All readers will be familiar with slider chests. In the spring chest each pipe has a separate pallet and spring, which is depressed by a sticker or peg from above, through holes in the upperboard, by levers or "parallels" running the length of the chest between pipe ranks. In addition there is a larger key pallet which lets wind into the channel for each note. (Translator)

CHAPTER IX

THE PIPES SHOULD BE PROPERLY SCALED; THE CONSTRUCTION OF MANUAL AND PEDAL KEYBOARDS.

Some desire that pipe proportions should be measured with a ruler. I maintain, however, that it is not necessary, because organbuilders never make their pipe scales to a proportion, according to rule; but for musical reasons some compromise is necessary. What is taken away from the bass is added to the smaller pipes. Again as far as length is concerned a little is given here and a little taken away elsewhere. Almost every organbuilder has his own technique. Tuning systems create other proportions. Basically, good pipe ranks should have a large diameter in the bass and a narrow diameter in the treble, for the latter sounds fine and bright and the former splendid and grave, according to the type of stop. There should be a sense of evenness in the rank so that there is no exaggeration in either treble or bass. In other cases, for particular reasons, a uniform scale can be employed.

The key must not be depressed heavily, slowly, or even too gently, or there will be a tendency to howling (ciphering). The keys must not lie too close together or they will stick in damp weather. Neither pedal nor manual must rattle or clatter, for that is a shocking thing and not to be praised. If the manuals and pedals are not placed with respect to one another so that the pedal D lies under a manual D♯ or a pedal C under a manual C♯ there is difficulty for the organist, and thus seldom will the work be heard to advantage. It would be a good thing if builders could agree in this matter of setting the centers of manual and pedal in line, for the sake of comfort in playing.

CHAPTER X

HOW ONE SHOULD EXAMINE BY EAR, ON DEPRESSING THE KEYS. HOW FAR "PIERCING" CAN BE ALLOWED. HOW ONE CAN DISCOVER THE "EQUALITY" OF HOLES IN THE SLIDERS.

So far all has been examined by eye and should now be examined by ear. All the stops should be pushed in firmly, all pallets opened to their full extent and the bellows filled. Then place a plank along the pedalboard and stand on it so that most if not all the keys are depressed. If there is a roaring or a hissing sound this is not a good sign. The defect is generally in the sliders, in that they have warped. If one raises the full power of the wind, then it can even force its way into the pipes. By similar means all the keyboards should be tested. For one should place both arms on the manual keys—and some builders do not like to see this—and then one can note if all is well when all the pallets are opened and the bellows filled, for these builders incorporate secret ventils which can be opened or closed at appropriate times to shut off wind, in cases of searching examination. To discover whether such a ventil is in operation a stop must be drawn. There are, however, right-minded people who do not employ such cunning. In dry weather one can allow a slight hissing, for if the sliders shrink (and it cannot be otherwise), a slider chest may even be rendered useless in these circumstances; the defect of "runnings" can be so great as to be intolerable. This can be discovered by pressing down the keys with both arms. If there is much leakage of wind the bellows will shudder. One examiner must depress the keys and another must observe the bellows. It is possible to get rid of this wind, without causing the pipes to sound, by making holes and grooves in upperboards, table, pipes, and feet—a "defect" that not one organist in a hundred would detect.

One should note that the holes in sliders and tables coincide; for otherwise it may happen that if a stop is drawn slowly some pipes will already be open, and drawing the slide further partially closes the holes again, preventing the pipes from receiving their full wind.

CHAPTER XI

How one should examine the stops one after another.

After this, one should take one stop after another right through the keyboard and hear if the pipes speak "purely" in themselves, if they are of similar tone in each rank and have prompt speech. It should be noted if the pipework is voiced to give too "slow" a tone so that it cannot speak properly, particularly in the long, open, small-scaled pipes. On the other hand, the attack can be made quicker but the tone may be "blunt" and unpleasing. Therefore, it is better that the tone should start slowly and maintain its rich character rather than the voicing should produce blunt tone. Pipes should speak without hesitation; they can always be revoiced for "bluntness" but richness of tone can never be recaptured.

Some people voice their pipes so that the lip is bent up and the pipe is easier to blow but tends to overblow, and then the tone is neither stable nor rich. It is everyone according to his own tastes! One can hear if one pipe speaks strongly and the other weakly; in this case the fault may be in the wind chest: in one case the pipe gets too much wind and in the other too little. If one pipe speaks clearly and the other bluntly this indicates that the cut-up may be too high in the latter, or it may be that there is wind leakage in some part of the chest, as has been mentioned already—the channels may not be sound and the upperboard and sliders may not fit properly so that wind escapes where it pleases. Thus, almost any pipe when played may sound too loud. This is a bad thing and must not be tolerated. This and similar faults can be remedied by "calking" (sealing) the wind conductors and chests properly, but this is a bad expedient and, as long as the instrument stands, little good can come of it.

Item. How to discover if the organ is fit for use. Select a 4′ principal or octave used by the builder for tuning, and note if it is in tune, taking temperature into account. In some organs, it is found that the fifths have been tuned false and are unfit for use. This should be corrected. For this purpose, take the same 4′ and note if it is in tune in all octaves; after that, each stop (as many as the organ contains) should be tested against this 4′ rank, or whatever else the builder uses for tuning. This is done for each keyboard. Care should be taken that mixtures speak as well as all the other pipes. There is often a great deception in that some builders specify mixtures of eight, ten, or twelve ranks of which only three or four speak properly, as has been mentioned already.

CHAPTER XII

How one can try stops together. To test if the wind is sufficient. Why some builders supply low-pressure winds. The main cause is the great fall of wind pressure in the ducts.

After each stop has been examined individually, take the stops in pairs and note if they blend, and then three or four together. Examine them in the same manner for balance and purity. See if they draw wind from each other, or lack wind (as often happens) if the "wind channels" in the chest, in the grooves, and at the pallets are too small.

This fault is known by some of the old builders as "wind-robbing," and some hold that it can be corrected if several bellows are put in the instrument, but they speak in ignorance of the nature of wind. Each bellows will give its correct wind, but only if the

channels, pallets, and wind trunks are correct and made to sufficient size.

It often happens that the channels are made too narrow, and if also they are not deep enough and the pallets are too small, then invariably the pipes of a large organ do not receive adequate wind. This trouble is often found in old organs; thus, in a rebuild this fault can receive attention. Otherwise the work is in vain, and a "wind-robbing" organ remains.

One should note if, in a full chord, the pipes lose their brightness, and if, when another bellows is depressed, they regain their tone or sound even duller. This fault has various causes, the chief of which are badly designed bellows and a poor wind supply. The flow of wind is too small and the wind trunks may not have a large enough cross section. Thus, full organ receives insufficient wind. Though two or three stops sound well together the full organ is unsteady. This inadequacy of wind must be corrected, of course; otherwise the builder cannot produce regular voicing, and as long as the organ stands, its sound will not be satisfactory. Still less will the reedwork speak properly in the full organ. More often than not this fault originates from the bellows rising too far against insufficient weighting.

The wind pressure of some organs is too low because of insufficient weight on the bellows. If certain builders gave their organ a rather higher pressure the noise of the escaping wind (a "hissing" here and a "howling" there) would at once betray defective workmanship in other parts of the instrument. One can detect this unsteadiness of tone and wind supply by holding a chord with the right hand and playing runs with the left hand or pedal. The resulting sounds will be uneven and an upleasant tremolo too will be detected in the steady tone. This is a very common fault in an organ, be it large or small, and various causes and opinions will be offered on the day of inspection. The main cause is this: When the wind supply is too great it may be that a pallet (or ventil) closes too violently, a surge arises, and its effects are transmitted through the bellows into the other pipes. This can be tested by repeating full chords on the full organ. If the movement of the keys matches that of the bellows, then, if the bellows fall violently, the wind will surge with force into the pipes. On such an organ there is no permanent remedy. I have recently seen how one distinguished builder takes the wind from all the bellows into one channel and from this channel the wind is led into the individual chests by ducts, and the pressures are constant. But if the ducts connect to an inadequate supply, of necessity a tremolo or wavering arises. Inadequate openings above the pallets, "in the channels," are also a cause of wavering, for the channels are not properly filled and the wind is agitated. Pallets must be fairly large and broad as well as long. They must not shake or tremble because of their weight.

Others say that a cause of this trembling (where there are spring chests) is that the main (key) pallet, being very short and broad, closes too violently and so agitates the wind. But too wide a pallet is a cause of too heavy a key touch, since the wind presses against its area. If, however, a pallet is long and narrow, then it moves easily, Others aver that an aid to steady wind is to constrict the wind ducts (trunks) at the chest end so that there is no possibility of back pressure. There is always a lag in building up pressure at the chest end. The longer a canal, the slower the wind travels through it. Others believe that large trunks are equally a cause of wavering, for the wind will surge through any large "hole" and produce a considerable inertia.

Although the above-mentioned causes may have some connection with one another, it still remains that a fall in wind pressure is the main cause. There are other things

which are too lengthy to mention here; but an intelligent builder will give the matter further thought.

CHAPTER XIII

ONE STOP AFTER ANOTHER SHOULD BE EXAMINED IN MAJOR THIRDS. HOW TO DISCOVER "APERTURES." THE ORGAN WOLF. THE CAUSE OF IMPURE VOICES. RARELY DOES AN ORGAN REMAIN PURE; FURTHER CAUSES.

It is quite necessary to examine one stop after another by the major thirds, for it is known that if a third is played on an organ with a slider chest the middle note may often be heard. For example, if the pipes C and E stand together in a tower, the D standing between can also be heard. Some call this the wolf in the organ, but this is not the proper wolf.[2] The fault occurs in the sliders. For if the wind pressure is too high the wind passes from the pipes at the side to the one in the center. Another cause is that the wind runs from one channel into the other; then all the pipes sound together.

The wolf, however, occurs in badly voiced and setout pipes. If two consonant pipes sound true individually, the quiet dissonance of the third sound can be heard; this does not come from its own pipe but from two badly sited pipes. The cause of this dissonance is that the pipes, though designed in proper proportion, are actually made to a different proportion in width or capacity and cannot be tuned properly.

This fault cannot be remedied unless the pipes are remade, either wider or narrower, or the voicing altered so that they sound pure in combination. This and other mathematical or physical phenomena often occur in organs, but many builders have not the knowledge to correct such a fault. Many aver that it is another separate pipe which causes the dissonance, but they are incorrect.

Sometimes it happens if one, for example, takes a c′ and tunes it truly to e and then e′ with c″, then e and c″ sound impure. One can find the cause by drawing a parallel. If one makes a small circular mark (on a piece of paper) and lets two straight lines from opposite sides meet it, then both lines have reached their objective because they have come to the same place separately. But they have not united in themselves because they have not met together at the center point. The same goes for tuning. If the pipes are large, one must represent a wide circle and it is necessary to find its exact center. Indeed, it is known that if one pipe is in tune with another, one can, if it is rather large, adjust the tuning "flaps" considerably without altering its pitch, but if a certain latitude is exceeded it is then out of tune. It can also happen that when two open ranks of pipes an octave apart are in tune perfectly and also to one mutation rank, then both "principals" are in tune to the mixture but are false when played together—the explanation being that the "tuning center" has not been achieved. Another cause of difficulty is bad pipe scales, which make the pipes more sensitive to changes of weather. A further cause is the hurrying of tuners over their work and not leaving the pipes to cool (after handling them or after climatic changes). If a pipe is of thicker metal than others, as often happens, the thinner pipes cool quicker than the thick ones. All this is to be noted, for one rarely finds an organ properly in tune, especially in the mixtures. This is not to be approved. Wooden pipes take longer to cool than metal ones, particularly if they are of thick wood. It is almost impossible that all stops will always remain in tune with each other. I have rarely found patience among organbuilders, and I have never yet heard an organ which remains in tune with changes of weather, though it is possible, and great diligence must be employed.

[2]The "proper wolf" was the interval A♭-E♭ in the old system of tuning. [Translator]

CHAPTER XIV

ON THE SUB-BASS OR UNTERSATZ. HOW IT IS MADE. NARROW AND WIDE PIPES VOICED TOGETHER. THE BASIS OF SCALING. WIDE PIPES GIVE A POMPOUS, FULL TONE; NARROW ONES A GENTLE TONE BUT ONE LACKING IN RESONANCE.

The larger the scale of a Sub-bass the more pompous and full it sounds. Open 16′ basses naturally have not the quick attack of closed pipes, so the Untersatz, especially the 16′ octave, should sound equal throughout, no pipe speaking more strongly than another; thus, the wind supply for the lower notes must be quite sufficient, otherwise nothing good can be expected. Heavy wind alone does not do this, even when the supply is quite sufficient; a pipe may sound gentle and dull at the keys, but at another place it may sound as strong as the others, if not stronger. Thus, an examiner must listen carefully before passing judgment. The cause can be that the place or corner (where the pipes are put) is a bad one and each pipe assumes a different tonal proportion so that it appears to sound differently when heard in different places, even though they are separated by less than a pace. Thus, the balance of the pipe rank cannot be judged from one place. Changes in weather also affect these big pipes. In winter the air is denser and the tone "drops"; in summer it rises again, some pipes losing their intonation thereby. Thus, the organist must note and the builder correct these fluctuations during the year. The critical organist, with careful attention, will note other defects occurring from time to time.

I will say nothing of scaling, since I am already guilty of increasing the difficulties in this little book. This I have already stated, that all builders who do not work well and do not enrich the church with good works are jerrybuilders, and this book has been written so that their work need not be tolerated. No one will learn how to build an organ from this book. I have not set out in the book how to construct organs, but only after their completion how they may be recognized as good. Therefore, nothing definite can be said about wind chests. If one does know how many and what kind of stops should be found in an organ, then one can make a calculation how large or small all the parts of a wind chest should be. If one reads with understanding Herr Bendeler's Organoiam and thinks further, then one will have come far, but it is still better if one makes careful calculations when reckoning, because many factors must be considered.

Certain builders make a great business of scaling, and for some it is their greatest secret, and some would have themselves thought great because of it, but when seen in its proper light it is only as difficult as Columbus' trick with the egg. Indeed much store is set on it, but a builder should not be jealous of his fellows and disciples that he purposely confounds them. Speaking for myself, I do not expect praise when I state that I know how to show various systems of tuning without difficulties, but this is not the place nor have I the inclination to talk about them. The basis of scaling is that pipes should be measured according to widths and not to musical proportions. Width must be taken into account so that equality in sound remains and large pipes do not drown the small ones—a defect which appears in many organs. Here is the scaling curve which shows by mathematics and mechanics how the diameters should decrease from the large pipes to the smaller ones. An exact proportion of length and diameter throughout the scale would not be satisfactory. This appears to be a paradox but it is the truth.

There is no universal rule that the cut-up must be one-third of the mouth width. A wide pipe does not need such a high cut-up as a narrow one, for the wind is not even in all organs. Some builders use wide scales, others narrow ones.

Much stress is placed on all ranks having similar scales according to the Principal; for example, c′ of an 8′ stop must have the same scale as the c of a 4′ Principal, likewise the F of a 3′ Quinte and the C of the 2′; this scale should remain even for the mixtures, otherwise the organ can never be voiced properly. Even if it is tuned well it will change with the weather. A wide pipe is quickly affected by the air and goes out of tune with the narrow pipes. Wide-scaled Gedeckts are very good; they can fill a church and do more than a small-scaled 8′ Principal, except in full organ.

CHAPTER XV

ON REEDWORK AND THEIR RESONATORS. GOOD REEDWORK WILL NOT BE AFFECTED BY THE TREMULANT.

Reedwork must be finally regulated in each rank: one pipe must not sound like a common regal, the second like a trumpet, a third like a dulcian, a fourth like a schalmei. Each should sound according to its particular type and maintain the tone which has been given to it. This is largely a matter of a properly proportioned resonator. One sees that nature plays her part in such a resonator and will not suffer a strange sound so removed from regularity, e.g., if I take an 8′ C, the body must resonate with the block and shallot. The "body" sounds g and c′ together, but another body set on C gives d or f♯. Thus it is difficult to obtain the C. Also one can see how the sounds are related to each other and sound together. Each pipe of the reedwork must speak easily and promptly, without growling, rattling, or shrieking in the lower octaves.

To gain regularity in such reedwork not only must the tongues and shallots be properly proportioned, but above all a good scale must be employed: the wider the scale the higher the note, as has previously been mentioned, for without this no equality of tone or intonation can come. Such badly scaled pipes cannot be voiced, since the volume of the body is related to a fixed scale, and no parish will have anything to do with them, since it happens that certain builders bore holes in the lower part of the pipe and this causes irregularity. It has been mentioned already that the large pipes of the Posaune, Trompete, and Schalmei should not overwhelm the small ones. Above all a builder must not make the basses too large, for this is a great cause of too loud a tone. On the other hand, if the trebles incline to be large, they sound well if they have an even, penetrating tone. Builders err somewhat in that the reed basses roar and the trebles are too gentle, so that little can be heard of the smaller discant pipes.

If reed stops are used singly they sound like trombones, trumpets, and certain cythars played together. Well-made reedwork can well take the tremulant; if it cannot bear it, then it has little use. I can, indeed, say that no tremulant can harm the reeds; if they sound even a little out of tune, then the tremulant is beating too violently.

CHAPTER XVI

ON THE TREMULANT. ITEM, ON COUPLERS AND CYMBAL-STARS.

The tremulant must hover quite gently, and the beat to which it is adjusted must be constant, even for full organ. It must not damp the organ tone, so that it speaks lazily and falsely. This is a common fault when tremulants are set in the wind trunks. The speed of the beat is to one's own taste. "Many heads, many ideas"—so long as the beat is regular. A tremulant cannot be praised if it rattles and causes great noise in the church. Tremulants should be well made and should not remain static. Annoyance should not be given in church, by one using it here and another there. All couplers must be made diligently so that they are not harmful to the organ and cause ciphering; the wire used in them must not be weak and not involved in too many twists and turns;

everything must move evenly and accurately. However, changes in weather cause much annoyance; some do not tolerate couplers because of this, others will just suffer them if they are inserted. Where they are possible, cymbal-stars should contain small bells tuned to the organ to give c, e, g, c; they should be gentle so that one hears singing and ringing and not like cowbells. The frame should be well made so as not to rattle.

CHAPTER XVII

GIVES OTHER DIRECTIONS AS TO WHAT ELSE SHOULD BE NOTED. ITEM, CONCERNING SPRING CHESTS.

The examiner should use all methods to see and hear if any trouble remains in one manual or another. It is not enough to spend an hour or two in such a visit. How is it possible for anybody to go and observe everything in so short a time when others could scarcely complete it in a year or two? Thus, one should consider everything and discuss it with the builder, why this or that should be, and take time over all things. Thus, the builder can be asked where future faults are likely to happen and how they may come about, so that the organist might repair them without further damage. This is a brief account of what may happen, especially in slider [sic!] chests.

CHAPTER XVIII

MORE OF SPRING CHESTS AND THEIR CONSTRUCTION.

Such a chest appears to be a fine invention; indeed, some will maintain that such a chest, well sealed and preserved, so long as the wood lasts, needs no major renovation and one can remove one piece after another without any particular difficulty and so repair any faults. This appears favorable, but the slider chest has been used for almost 300 years, as Praetorius writes in the aforesaid place. Actually, spring chests are employed by few builders, since many difficulties are involved, which cannot be mentioned in so short a space. However well they are made or repaired they cause a thousand times more trouble than a slider chest; experience shows this. A type of spring chest is still made where the pillars can be removed without disturbing the pipes; but because the upper pillar is wedged and not secured by screws, then inevitably in dry weather the wind flows between both pillars and avoids the pipes. If the wood is so dry that it cannot shrink further (which is hard to imagine), then it will swell in damp weather so that not a single pillar can be removed and even the attachment may be torn violently apart. If the upper pillar, which touches the pipes, is secured with screws the invention might be a good one, even in damp weather, apart from the work incurred. And this fault may be corrected if need arises, but which organist or organbuilder will sit in the church or at the organ awaiting sudden changes of weather? I maintain that it would go unnoted. Some will insist that the organ can be maintained by care of the channels, and thus avoid a major rebuild. Experience shows otherwise. Much more could be written about this if necessity demanded.

Concerning spring chests: (1) It is to be known that now they are rarely made, since they cause much more work than the slider chests. (2) Every builder is not acquainted with them. (3) They require a diligent builder—one who is always wondering if a part is sticking or a "prop" has disappeared, if a spring has broken (as often happens), or a lever is badly adjusted so that a pallet does not close properly. Levers may not be properly drilled so that they stick fast in the holes. The movement of the sticker bar may be too high so that the small levers come apart. Sometimes the springs are too weak, so that the stickers fail to return and the pallets stay open. The springs may then drop out and then something may fall under the pallets.

All in all, where much work is required there is always something to be improved. The spring chest involves more work than a slider chest and there is always something to be repaired in the former. The pallets of a spring chest are invariably secured to the pillars with tin (or pipe metal) so that when this corrodes it damages the leather, so the builders always have something to do, which is to their advantage and this at some cost to the church and parish. For such attachments brass should be used and not iron. (See Praetorius, vol. 2, p. 107 ff. and p. 159 ff., which states his views on spring chests.)

Since one rarely finds a reliable spring chest because of the intricacies involved, I esteem a good slider chest, especially when it is well made, to be more reliable. Experience shows that a slider chest will stand for more than a century, if well made. An excellent and famous builder reports that in 1694 at Saint Martin's, Gröningen, he had to remove a chest made in 1442 by Martin Agricola. This chest was so good that it would have stood for another century except that it was too short (a compass) for current use. On the other hand a spring chest always requires attention. The builder should be asked to give a stipulation, which should be easily granted and accepted, to maintain the organ faithfully. I warn you of the properties of the spring chest. I have discovered them and experienced them.

Chapter XIX

On doubled (i.e., borrowed) stops: How a stop may be used simultaneously on manual and pedal. On the unsteadiness of wind from the bellows. What kind of difficulties that can cause.

The use of duplexed (borrowed) stops, so that they play on either manual or pedal, is not altogether desirable. The effect is often bad, especially with reeds, because of insufficient wind or wind lingering in corners, in channels, in conveyances, et cetera. Thus, it is better if each rank of pipes has its own slider. If it can be afforded, it is worth the work. The system of duplexing has some advantage for poor churches, which commonly cannot afford large stops. Nevertheless, the so-called "flap valves" used with spring chests frequently cause trouble.

Diligent builders will note the peculiarities of wind supply and the cause of unsteadiness; and why one delivery of wind at the pipes is not the same as another, so that no pure harmony results. Even if the unsteadiness arises at the bellows, there may be some virtue in the builder if he knows how to make and set up the bellows, which may then be properly weighted; and also, if with the aid of a special instrument[3] he can steady the wind for all to see. Even if only a pound is added to or removed from the largest bellows, then a change will occur. On the other hand, some builders believe that they can give an organ its right wind merely by listening, whilst tiles, bricks, or slabs of stone are added or removed. Alas for the poor organist blessed with such an instrument! All too often, that reed, supposedly in tune, gives a quite different sound when the folds of the bellows stick, or when a bellows runs out, or when another is filled. One might wish that the voicing was different—and for that cause, much reedwork cannot be used.

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[3]The reference is to the water manometer invented early in the century by Förner. (See the frontispiece.) [Translator]

CHAPTER XX

IF ONE CAN TEST WIND PRESSURE WITHOUT A GAUGE. WHAT MIGHT BE OBSERVED FURTHER ABOUT BELLOWS.

The majority of builders indeed maintain that they can make the wind steady, when levers move evenly, without a gauge. I have found that when three bellows are going evenly the wind is steady; but when a fourth is added the wind rises some degrees, but if care is taken to make it move evenly with the others the pressure remains constant and there is a better wind pressure than before. The cause of the difficulty is that the bellows valves open with difficulty when the other bellows are going, and so its action has been held back; but when extra force has been applied it has taken the lead and given an excess. Any stiffness of the bellows valves should be noted and attended to; otherwise an unsteadiness will result. This defect would be very hard to find without a gauge. Many ask: Why should wind from one bellows with a single weight be unsteady? Answer: The cause is as clear as day: When the bellows rises it describes a curve and the "perpendicular" or pressure point comes nearer the center (hinge). The nearer the movement to the center the weaker is the pressure; the further away, the stronger.

Experience shows that when the folds move too far apart and the angle between the wooden top and base is too great, so that when the lowest has extended and, in going down again, the upper fold is beginning to close up, it will be found that the wind becomes unsteady.[4] If one wishes to remedy this, then the bellows should not be allowed to rise so far, but this may bring a worse evil—that they empty quicker. As the blower treads the bellows, he sets up a shaking, particularly in summer, when the grooves and "pores" in the wood become wider. Such shaking from heavy "treading" causes unsteady wind; and many organists must have had painful experience with this. On the other hand, builders are not likely to worry much about this. As far as they are concerned, the organ, once made, can function as it pleases.

A little help towards securing steady wind can be obtained by placing the end of the bellows with folds lower than the other (hinged) end, and noting carefully how high they will rise. Likewise, one can experiment with counterweights, but if the bellows have two or more folds, then this help is useless. "*Experto credas Ruperto.*"[5]

Although much has been said about pallets, the novice should have a clear understanding about the functions of each. I have taken care to describe some here: First, the bellows valve, where the wind pressure is created in the bellows. Then the channel ventils, which lie in the channels into which the wind is conducted from the bellows and prevent one bellows from drawing wind from another. Third, the main pallets, moved by the keys, which cause the pipes to speak. Then, in the spring chests are spring pallets, controlled by beams, and equal in number to the pipes of the organ, except in the mixtures and "borrowed" stops, where there are two, three, four, or more pipes per pallet. Finally one finds ventils in particular channels to cut off the wind from manual and pedal sections; hence these are called *sperr-ventils.*

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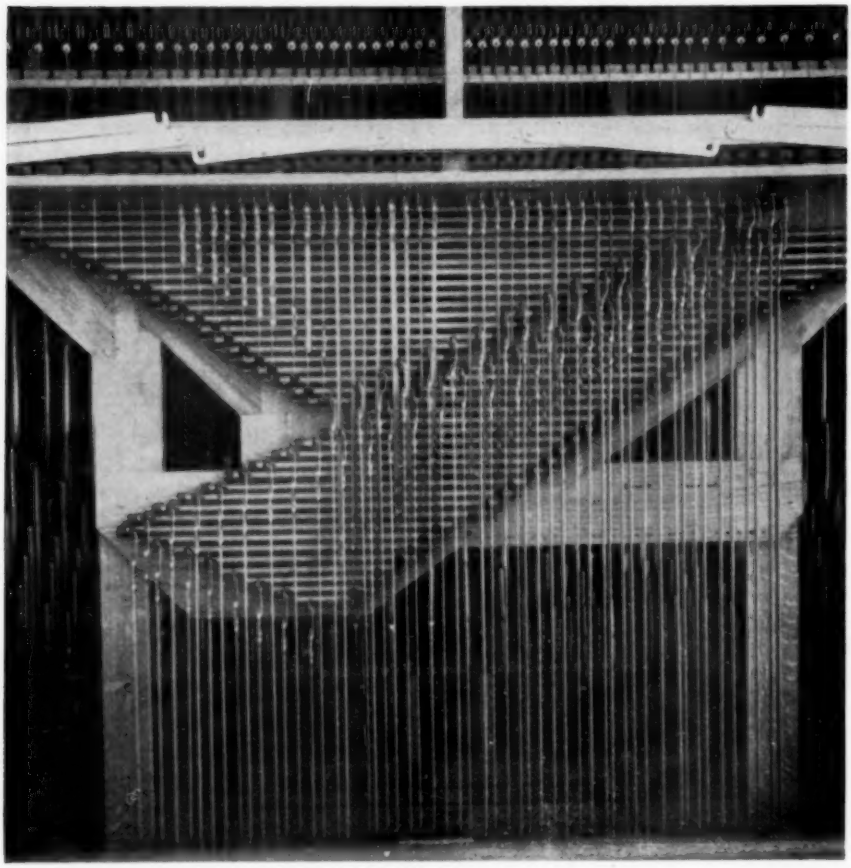
[4]These are the shortcomings of the old diagonal bellows, before the days of the "horizontal" reservoir with Cumming's improvements! [Translator]
[5]Literally: The opinion of an expert (i.e., one who has tried it) is worth believing. [Translator]

Here I must say something about counterweights, for they are most useful. I have already noted that bellows, as made nowadays with folds, without counterweights, can be made so accurately as not to fluctuate a degree either way. This can be done by a lever system without counterweights. Some bellows have weights which can be adjusted in position as desired. The builder must, however, see that the weights are not too strong for the bellows. One cannot give twofold or threefold bellows counterweights; they are no longer used.

(To be continued)



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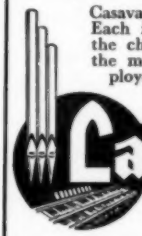

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